

Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
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Case No. 122 of 2024

Petition of MSEDCL for seeking Approval for Long Term Procurement of 1052 MW grid connected Solar Photovoltaic Power Projects to be set up on lands of Water Resource Department of Maharashtra for Lift Irrigation Schemes (LIS) in the State of Maharashtra.

Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL)...	Petitioner
Water Resource Department, Government of Maharashtra (WRD-GoM)...	Respondent

Coram

Sanjay Kumar, Chairperson
Anand M. Limaye, Member
Surendra J. Biyani, Member

For the Petitioner:	Ms. Deepa Chawan (Adv) Mr. Lokesh Chandra (Rep.)
For the Respondent:	Mr. M. J. Naik (Rep.)

ORDER

Date: 20 September 2024

1. Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) has filed the present Petition on 6 August 2024 under Regulation 39 (c) of MERC (Transaction of Business and Fees & Charges) Regulations, 2022 and MERC (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2019 and its successive Amendment.
2. **MSEDCL's main prayers are as under:**

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a) To admit the Petition as per the provisions of Regulation 39(c) of MERC (Transaction of Business and Fees and Charges) Regulations, 2022 and Maharashtra Electricity

Regulatory Commission (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2019

- b) To accord approval for procurement of 1052 MW solar photovoltaic power projects to be set up on lands of WRD for LIS as per GoM GR dated 15.03.2024.*
- c) To consider the submissions made by the Petitioner and consider the same positively while deciding the Petition as well as for further actions;*
- d) To pass any other order/relief as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice;*
- e) To condone any error/omission and to give opportunity to rectify the same;*
- f) To permit the Petitioner to make further submissions, additions and alterations to this Petition as may be necessary from time to time; and ”*

3. MSEDCL in its Petition has stated as follows:

- 3.1. The Government of Maharashtra (GoM) in its endeavour to provide daytime electricity to agriculture consumers through decentralized solar power projects, has launched the Mukhyamantri Saur Krushi Vahini Yojana 2.0 (MSKVY 2.0) for solarization of agricultural feeders.
- 3.2. Under MSKVY 2.0 multiple tenders have been floated for procurement of solar power. MSEDCL has carried out tendering under following two modes:
 - (a) an open tender where bidding was conducted on a substation level;
 - (b) a cluster tender where the bidding was for an entire cluster comprising of multiple substations with the project to be developed on revenue land that had been identified and sub-leased to Project SPVs.
- 3.3. The Commission vide its Order in Case No. 164 of 2023 dated 11 August 2023 has approved the bid documents for solarisation of agricultural feeders. Further, the tariffs discovered under the bidding processes have been adopted by the Commission vide its Order in Case No. 32 of 2024 dated 06 March 2024.
- 3.4. Under MSKVY 2.0, the substations catering agricultural load were identified and targeted for solarisation. However, the Lift Irrigation Schemes (LIS) are not covered under solarisation plan.
- 3.5. In order to cover LIS consumers, the GoM has issued Government Resolution dated 15 March 2024. In line with MSKVY 2.0, the proposed scheme for LIS solarisation envisages the provision of lands by the Water Resource Department to the solar project developers.
- 3.6. The scheme has following objectives:

- To reduce the subsidy burden of GoM.
- To design long term financially sustainable model for supply of electricity to LIS.
- To reduce carbon emissions.
- To reduce greenhouse emissions to cope with climate change.
- To reduce the dependency on conventional energy sources.

3.7. Salient features of the scheme are as follows:

- 3.7.1. The required land will be provided by the Water Resource Department /LIS consumers.
- 3.7.2. The total generation will be sufficient to meet the existing requirement of the LIS consumers throughout the life of the solar plant.
- 3.7.3. LIS consumers consume the power during daytime as well as during nighttime. The MSEDCL's power purchase cost may increase when LIS consumers require electricity supply during the non-solar evening peak time hours. Hence, solar power capacity is proposed such that it will generate excess power during the daytime and result in bringing down the overall power purchase cost of MSEDCL.
- 3.7.4. Since the proposed scheme will result in reduction of subsidy burden of GoM. Hence, the scheme envisage incentive to the successful developers in the form of financial assistance of Rs.320 Lakhs /- per MW of solar capacity which will be disbursed based on specified milestones.
- 3.7.5. The implementation of the scheme will be carried out as follows:
 - a) Competitive bidding by MSEDCL and execution of PPA with solar project developers.
 - b) The responsibility of operation and maintenance of the solar plants will be of the developer.
 - c) Netting of solar generation from the projects under the scheme with consumption of LIS consumers.
 - d) Grid connectivity to the solar projects as per MERC Rules and Regulations.
 - e) MSEDCL to finalize land requirement for LIS consumers solarization.
 - f) WRD will provide free lands and submerged lands depending on the requirement of MSEDCL.
 - g) Annual reconciliation of the import and export units will be done by MSEDCL and WRD jointly. In this scheme MSEDCL will be revenue neutral.

3.8. Revenue Neutral Model

- 3.8.1. The annual requirement of the existing LIS consumers is 1242 MU. The estimated capacity required for the solarization of the LIS consumers considering the average capacity utilization factor of 24 % is 590.75 MW.
- 3.8.2. The capacity utilization factor of 24 % is considered referring to the average of the actual generation data of the solar projects commissioned so far.
- 3.8.3. Against 590.75 MW the solar capacity proposed is 1052 MW. This excess capacity of 461 MW comprises of
 - Capacity required for offsetting the degradation factor,
 - Capacity required for offsetting the power purchase cost for supplying the consumption during the non-solar hours and
 - Capacity required for offsetting the amount paid to the solar project developers for power purchase of excess capacity.
- 3.8.4. The proposed revenue neutral model is not expected to impact the interest of consumers at large due to the inherent offsetting of power purchase cost. This being an innovative structure, there are no existing regulations governing such power procurement and hence MSEDCL prayed to allow the Petition under the aforesaid Regulation.
- 3.8.5. The estimated solar capacity required is 1052 MW. However, the present tender is for 800 MW which will cover the solarization of the government LIS schemes, owned and operated by the WRD.
- 3.8.6. The LIS operated by the cooperative societies/ sugar factories/others will also be solarized under similar model as and when they are able to provide the required land for the solar plants.
- 3.8.7. Regulation 39(c) of MERC (Transaction of Business and Fees and Charges) Regulations, 2022 provides that nothing in Regulations shall bar the Commission to deal with any matter or exercise any power under the Act for which no regulations have been framed.

3.9. Regulatory Approval

- 3.9.1. The MoP, vide its Notification dated 28 July 2023, has issued guidelines under Section 63 of the Electricity Act (EA), 2003 for Tariff based Competitive Bidding for Procurement of Power from Grid Connected Solar PV Power Projects.
- 3.9.2. The Commission in its Order dated 6 December 2017 for Case No. 157 of 2017, seeking approval of Long/Medium/Short term procurement of Renewable Energy through Competitive Bidding has ruled that MSEDCL shall come before the

Commission through a specific Petition prior to the bidding process only if MSEDCL requires any further deviation with respect to the bidding documents.

- 3.9.3. The RfS and the Power Purchase Agreement have been floated in line with the deviations that have been approved by the Commission in Case No. 164 of 2023. The deviations from standard bidding document for long term procurement of solar power were approved by the Commission vide its Order dated 6 March 2024 in Case No. 28 of 2024.
- 3.9.4. MSEDCL will approach the Commission for adoption of tariff offered under Section 63 of the EA, 2003, and/or for approval of any minor changes/modifications which may be required to be made to the draft of the RfS and/or the PPA, for any reason, if so required, after completion of bidding process.

3.10. Salient Features of the Tender

- 3.10.1. The total bid capacity intended to be procured by MSEDCL is 800 MW from LIS solarization scheme for a period of 25 years. MSEDCL intends to fulfill its Renewable Power Purchase Obligations along with the intention to meet current and future power requirements.
- 3.10.2. The minimum bidding capacity is 10 MW. The bid will be awarded through a competitive bidding process (e-reverse auction), wherein the bidder quoting the lowest tariff would be selected.
- 3.10.3. The tender intends to remove one of the major difficulties faced by a solar power developer while establishing any project is the availability/procurement of adequate land. To ease the process of arranging land and enabling speedy implementation of a project, GoM along with WRD has already identified the land parcels. The land parcels required for the construction, operation and maintenance of the project are going to be WRD lands. However, flexibility is provided to the selected bidder to procure alternate land parcels on its own.
- 3.10.4. Further, MSEDCL/MSETCL will facilitate grid connectivity approvals for the project from Maharashtra Energy Development Agency (MEDA).
- 3.10.5. The primary objective of the Request for Selection (RfS), is to fulfill the increasing electricity requirement and increase the usage of solar energy, thus promoting the usage of clean energy. Further, this will reduce the subsidy burden provided by GoM for the LIS. The selected bidder shall be eligible for state financial assistance under the LIS of maximum Rs.320 Lakhs per MW for capacity corresponding to size of the Project, to be disbursed on completion of specified milestones.

3.10.6. In MSKVY 2.0 tender, the ceiling tariff was Rs. 3.10/- per unit. For this tender 30 % (Central Financial Assistance) CFA was eligible to the bidders. In this tender SFA (State Financial Assistance) of 80 % is eligible to the bidders. Hence, MSEDCL has identified Rs. 0.90/kWh as the ceiling tariff both on the unit level and project level.

3.11. Purpose of Procurement

Renewable Purchase Obligations

3.11.1. The MoP, vide its notification dated 22 July 2022 has notified the Renewable Purchase Obligation and Energy Storage Obligation trajectory till FY 2029-30.

3.11.2. The Commission in its MERC (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) (First Amendment) Regulations, 2024, notified following trajectory:

Year	Wind RPO	HPO	Distributed RPO	Other RPO	Total RPO
2024-25	0.67%	0.38%	1.50%	27.35%	29.91%
2025-26	1.45%	1.22%	2.10%	28.24%	33.01%
2026-27	1.97%	1.34%	2.70%	29.94%	35.95%
2027-28	2.45%	1.42%	3.30%	31.64%	38.81%
2028-29	2.95%	1.42%	3.90%	33.10%	41.36%
2029-30	3.48%	1.33%	4.50%	34.02%	43.33%

3.11.3. The procurement of solar power will also enhance MSEDCL's ability to meet its RPO obligations.

3.12. MSEDCL has floated tender on 15 March 2024 for procurement of Solar Power from projects to be set up on lands of WRD of Maharashtra for LIS. The revised RfS was uploaded on 21 May 2024. The pre-bid meeting was held on 28 May 2024 and the reply to the pre-bid queries are uploaded on 11 June 2024.

3.13. The bidding process was initiated with the floating of RfS on 15 March 2024. The same was done to avoid loss of time that MSEDCL would have faced in view of the then forthcoming Model Code of Conduct that came in to effect from 16 March 2024. The release of document prior to the implementation of the Model Code helped MSEDCL in concurrently running the processes in the interim and complete other activities related to the process involving conduct of pre-bid meetings and response to queries of bidders and making consequent changes in the tender documents.

4. At the E-hearing held on 20 August 2024, the Advocate appearing on behalf of MSEDCL presented rationale of the proposed procurement. Initially WRD-GoM was not a party

respondent. Considering the pivotal role of WRD-GoM, the Commission directed MSEDCL to implead WRD-GoM as a party respondent and make elaborate submission on Tender conditions/deviations and regulatory settings during next hearing.

5. The Commission heard the matter again on 23 August 2024, Representative of MSEDCL stated that there is no additional deviation (than already approved in Order dated 6 March 2024) from competitive bidding guidelines for proposed solar power procurement. Hence, the Commission may allow MSEDCL to proceed with the bidding process. He highlighted that MSEDCL and GoM are in win-win situation in proposed scheme.

Commission's Analysis and Rulings:

6. MSEDCL in present Petition sought approval for long term power procurement from proposed 1052 MW grid connected Solar Photovoltaic Projects to be set up on lands of WRD-GoM for lift irrigation schemes. For proposed procurement, MSEDCL has anticipated a new model, whereby netting of solar generation from the proposed solar projects will be carried out with consumption of LIS consumers. Considering operational hours of LIS schemes, MSEDCL in its proposal stated that during non-solar hours it will arrange the power to LIS. The solar capacity is designed for higher quantum, so as to compensate for the increase in the power purchase cost during the non-solar hours. Further, MSEDCL has identified Rs. 0.90/kWh as the ceiling tariff.
7. The Commission notes that in prayer 'b', MSEDCL has requested approval for procurement of 1052 MW of solar power as per GR dated 15 March 2024. In this regard, the Commission is of the opinion that the Government is empowered under the Electricity Act 2003 to provide direct subsidy to any consumer or class of consumer. The Commission while determining tariff for retail consumers does not include such direct subsidy and hence Distribution Licensee is expected to receive such direct subsidy in advance before giving benefit of subsidized tariff to consumers. Considering such limited role of the Commission in subsidy scheme of the Government, during the hearing, the Commission specifically asked MSEDCL whether they are seeking any deviation from competitive bidding guidelines for procurement of these 1052 MW solar power. In reply, MSEDCL stated the Commission has already approved deviation in its Order dated 6 March 2024 in Case No. 28 of 2024 related to MSKVY 2.0 and MSEDCL is not seeking any more deviation from competitive bidding guidelines.
8. Considering above submission of MSEDCL, as 1052 MW of solar power procurement will help MSEDCL to meet its RPO, and as MSEDCL has not sought any additional deviation from competitive bidding guidelines than that has been approved in Order dated 6 March 2024, the Commission allows MSEDCL to proceed with competitive bidding process as per Guidelines.

9. Having ruled as above, the Commission clarifies that it has not gone into merits and implications of proposed modalities for supplying power to LIS consumers. The Commission will consider the same in the appropriate proceeding.
10. Hence, the following Order.

ORDER

- 1. The Petition in Case No. 122 of 2024 is allowed subject to observation in Para (9).**

Sd/-
(Surendra J. Biyani)
Member

Sd/-
(Anand M. Limaye)
Member

Sd/-
(Sanjay Kumar)
Chairperson

